## **REMARKS**

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

Claims 11, 35-37, 39-65 and 68-70 are pending in this application. Claims 11, 35 and 36 are independent. By this Amendment, Claims 11, 35-37 and 43 are amended, Claims 68-70 are added, and Claims 38, 66 and 67 are canceled without prejudice. Support for the amendments and new claims can be found, for example, in Fig. 2 and page 15, lines 12-14 of the specification. No new matter is added.

The Official Action objects to Claims 66 and 67 as duplicates of Claims 53 and 54, respectively. The objection is obviated by the cancellation of Claims 66 and 67. Thus, withdrawal of the objection is respectfully requested.

The Official Action rejects independent Claims 11, 35 and 36 under 35 U.S.C. §102(b) over Byker et al. ("Byker"), U.S. Patent No. 6,446,402.

Independent Claims 11, 35 and 36 are amended to recite a laminated glazing, for use in a vehicle, comprising, *inter alia*, a first ply of glass and a second ply of glass each having oppositely facing first and second surfaces, a plastic interlayer laminated between the plies of glass and contacting the first surface of the first ply of glass and the first surface of the second ply of glass, and a low emissivity coating on the interior surface of the glazing, the low emissivity coating overlying the second surface of the first ply of glass, and the second surface of the second ply of glass is exposed.

Independent Claim 11 additionally recites that the at least one ply of glass that is body-tinted is body-tinted glass comprising a colourant portion including 0.8 to 4.0 % (by weight of the glass) of total iron (calculated as Fe<sub>2</sub>O<sub>3</sub>), 0.05 to 1.6 % by weight

of ferrous oxide (calculated as FeO), a visible light transmission of 88 % or less and a transmitted energy of 72 % or less at 2.1 mm.

Byker discloses a window structure 10 including a thermochromatic layer 50 and a barrier layer 30 between two glass substrates 20 and 21, and a low emissivity layer 70 facing the inside of the window structure 10 (see Fig. 1c and col. 24, lines 25-34). The Official Action takes the position that the window structure 10 corresponds to the claimed laminated glazing. However, as shown in Fig. 1c, Byker's barrier layer 30 ("plastic interlayer") simply contacts a first surface of the second glass substrate 21 and a surface of the thermochromatic layer 50. That is, Byker's barrier layer 30 ("plastic interlayer") only contacts a surface of one of the glass substrates 20 and 21. Byker's barrier layer 30 ("plastic interlayer") does not contact a first surface of the first glass substrate 21 and a first surface of the second glass substrate 21.

In addition, the thermochromatic layer 50 is an essential element of the window structure 10. In particular, Byker discloses that the window structure 10 is a *thermochromatic device* that allows sunlight or solar radiation into a building when the ambient temperature is low and that substantially blocks solar radiation when the ambient temperature is high, especially when sunlight is directly on the window (see Abstract and col. 1, lines 38-43). To accomplish these objectives, the embodiments of the window structure 10 include one or more thermochromic layers which change from absorbing less light energy to absorbing more light energy as the temperature of the thermochromic layer(s) is increased (see col. 2, lines 52-56). Thus, one skilled in the art would not have found it obvious to modify Byker's window structure 10 to remove the thermochromatic layer 50 from the configuration shown in Fig. 1c of Byker.

Further, Byker discloses at Column 15, lines 30-46 that each glass substrate may be made of a combination of glass and plastic materials. However, even if Byker's glass substrate 21 was made of, for example, a glass-plastic-glass configuration, neither of the surfaces of either of the glass layers would be exposed as in Claims 11, 35 and 36. In particular, one surface would contact the plastic and the other surface would contact either the thermochromatic layer 50 or the low emissivity layer 70.

The Official Action also takes the position that Byker's thermochromatic layer 50 may correspond to the claimed interlayer because the thermochromatic layer 50 is a PVB with thermochromatic material and Applicants disclose that the interlayer material may be clear PVB or tinted PVB (see, e.g., Applicants' Abstract). However, even under this interpretation of the thermochromatic layer 50, the thermochromatic layer 50 merely contacts a surface of one glass substrate 21 (see Fig. 1c of Byker). The thermochromatic layer 50 does not contact a first surface of the first glass substrate 21 and a first surface of the second glass substrate 21.

Thus, Byker fails to disclose, in combination with the other claimed features, a laminated glazing including a first ply of glass and a second ply of glass each having oppositely facing first and second surfaces, a plastic interlayer laminated between the plies of glass and contacting the first surface of the first ply of glass and the first surface of the second ply of glass, and a low emissivity coating on the interior surface of the glazing, the low emissivity coating overlying the second surface of the first ply of glass, and the second surface of the second ply of glass is exposed, as recited in independent Claims 11, 35 and 36. Therefore, independent Claims 11, 35 and 36 are patentable over Byker for at least these reasons.

In addition, the Official Action acknowledges that Byker fails to disclose one of the glass substrates 20 and 21 being body-tinted glass having a colourant portion including 0.8 to 4.0 % (by weight of the glass) of total iron (calculated as Fe<sub>2</sub>O<sub>3</sub>), 0.05 to 1.6 % by weight of ferrous oxide (calculated as FeO), a visible light transmission of 88 % or less and a transmitted energy of 72 % or less at 2.1 mm, as now recited in independent Claim 11. Thus, independent Claim 11 is patentable over Byker for at least these additional reasons.

The Official Action observes that these additional features now recited in independent Claim 11 are disclosed by U.S. Patent Application Publication No. 2002/0025899 A1 to Higby et al. ("Higby"). However, the glass composition disclosed by Higby has a neutral tint only containing 0.3% to 0.7% by weight iron Fe<sub>2</sub>O<sub>3</sub> (see Abstract and paragraph [0010] of Higby). Thus, Higby's range of percent of iron Fe<sub>2</sub>O<sub>3</sub> by weight is outside the range of 0.8 to 4.0 percent recited in independent Claim 11. Further, one skilled in the art would not have desired to modify Higby's disclosed amount of iron Fe<sub>2</sub>O<sub>3</sub> by weight to be more than 0.3% to 0.7% because doing so would reduce the visible light transmission to be below the threshold of at least 70 percent (see Abstract of Higby).

Additionally, the visible light transmission of at least 70 percent and the direct solar heat transmission of 58 percent disclosed by Higby is of a glass substrate that is 4 mm thick (see paragraphs [0006] and [0026] of Higby), rather than the 2.1 mm recited in Claim 11. Moreover, if Higby's glass substrate were modified to have a lesser thickness of 2.1 mm, such a thinner substrate would have absorbed less visible light and energy than the 4 mm thick substrate. This is because there would have been less absorbing material present in the substrate, and because the level of total iron in Higby is considerably less than that now recited in Claim 11.

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Accordingly, the amount of light transmission and direct solar heat transmission

would have increased beyond the claimed 88 percent and 72 percent, respectively.

That is, if Higby's glass substrate were modified to have the claimed thickness of 2.1

mm, the amount of light transmission and direct solar heat transmission would have

not remained below the claimed visible light transmission of 88 % or less and the

transmitted energy of 72 % or less.

Thus, independent Claim 11 is patentable over the combination of Byker and

Higby for at least these reasons.

Dependent Claims 37 and 39-65 are patentable over the applied references at

least by virtue of their respective dependence from patentable independent Claims

11, 35 and 36. Thus, a detailed discussion of the additional distinguishing features

recited in these dependent claims is not set forth at this time. Withdrawal of the

rejections is respectfully requested.

Should any questions arise in connection with this application or should the

Examiner believe that a telephone conference with the undersigned would be helpful

in resolving any remaining issues pertaining to this application the undersigned

respectfully requests that he be contacted at the number indicated below.

By:

Respectfully submitted,

**BUCHANAN INGERSOLL & ROONEY PC** 

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